PROFITABLE GROWTH

Save Energy Now Tools and Resources

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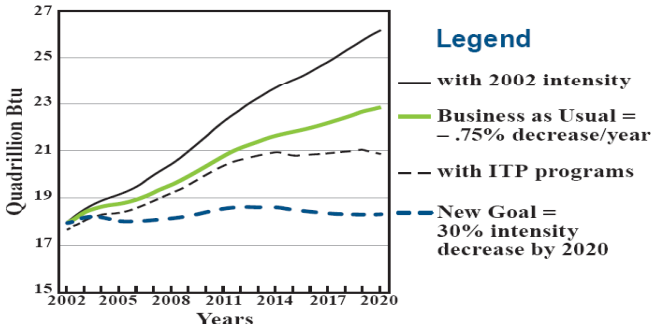
PROFITABLE GROWTH
A New Story for U.S. Manufacturing

U.S. Energy Use



Sources: EIA AEO 2004, EIA MECS 2001, ITP

Quads: one quad is one quadrillion Btus of energy, or 1x1015 Btus

"**Energy intensity** means the primary energy consumed for **each unit of physical output** in an industrial process"
-- As defined in *EPAct 2005*, Section 106

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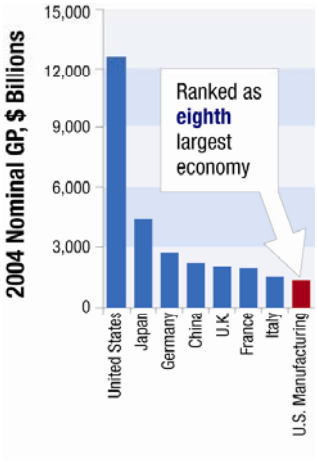
Did You Know…?

The U.S. manufacturing sector:

- Employs 12 million people
- Makes the highest contribution to GDP (12%)
- Supplies ~60% of U.S. exports, worth $50 billion/month
- Spurs job creation and investment
- Every million dollars in energy cost savings has the potential to create approximately 16 – 17 new jobs.



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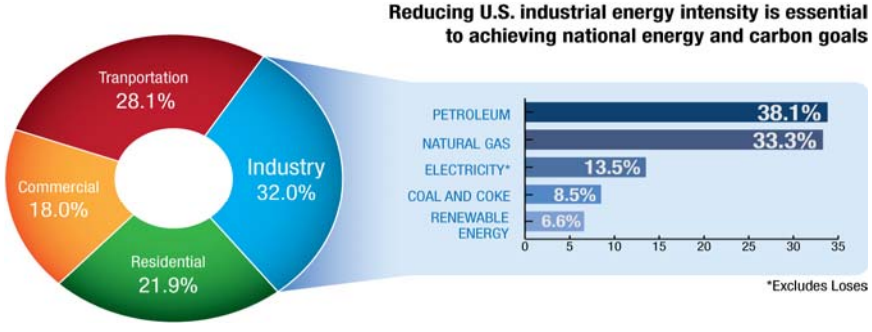
Industry and Energy Use

- The U.S. manufacturing sector consumes ***more energy*** than any other portion of the economy. Industry represents approximately 32% of total U.S. energy consumption.



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Progress Is Achievable:
Energy Efficiency is the Simplest Approach

- Existing technologies *with an attractive internal rate of return* can cut the growth in global energy demand by half or more within 15 years.
  -- *Curbing Global Energy Demand Growth*, McKinsey & Co., May 2007

- More than 10% of U.S. industry's energy use could be saved by more broadly adopting existing technologies that yield an internal rate of return greater than 10%.
  -- McKinsey, 2007

- Industries around the globe can cut CO_2 emissions 19 to 31% using *proven* technologies and practices.
  -- International Energy Agency, 2007

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National Initiative to Reduce Energy Use

Save Energy Now: An Industrial Sector National Initiative

GOAL: Drive a 25% reduction in industrial energy intensity by 2020

- The *Energy Policy Act of 2005* (EPAct) has mandated that 25 percent of energy be saved in 10 years. The *Save Energy Now* program was established to achieve these goals.
- Encourages industry to voluntarily reduce its energy usage in a period of volatile energy prices and uncertain supplies by partnering with all U.S. manufacturing facilities.
- Creates momentum to significantly improve energy efficiency practices throughout the industrial sector.
- Utilizes interagency collaborations and relationship with industry partners to fulfill this goal.

Save ENERGY Now®

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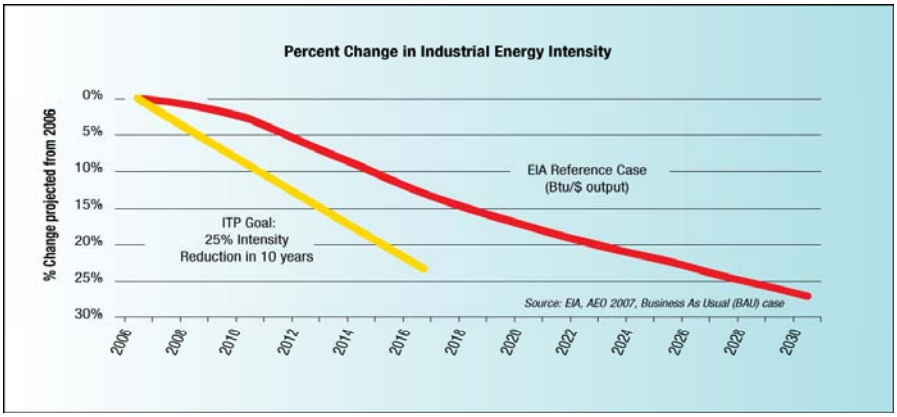
Energy Intensity Reduction



ITP's goal to reduce energy intensity by 25% in 10 years would reduce energy intensity more quickly and efficiently than business as usual.

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Save Energy Now Strategy

Partner with U.S. industry, utilities, states, universities and other stakeholders to help manufacturers save energy and money, increase productivity, and reduce environmental impacts by:

- Accelerating the adoption of energy-efficient technologies and practices
- Conducting vigorous technology R&D
- Supporting commercialization of emerging technologies
- Providing plants with access to proven technologies, energy assessments, software tools, and other resources
- Promoting energy and carbon management throughout industry

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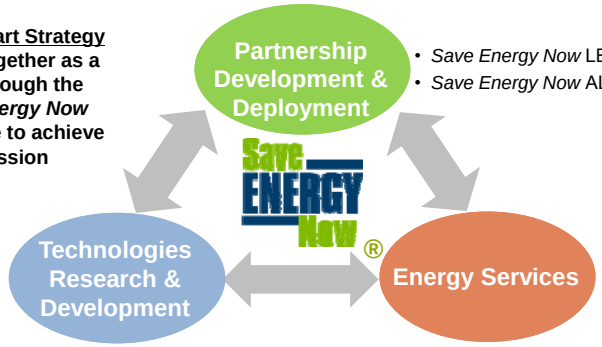
Industrial Technologies Program (ITP)

Three Part Strategy
Work together as a team through the *Save Energy Now* initiative to achieve ITP's mission



- *Save Energy Now* LEADER Companies
- *Save Energy Now* ALLY Organizations

- Industry-specific
- Crosscutting

- Industry Standards
- Training

- Tool Development
- Assessments

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ITP R&D Program Areas

Industry Specific Applications

- Aluminum
- Chemicals
- Forest and Paper Products
- Metal Casting
- Steel
- Information Technology

Advanced technologies for specific, energy-intensive industries

Crosscutting Technologies

- Materials, Sensors, and Combustion
- Energy-Intensive Process R&D
- Nanomanufacturing & Other Interagency Manufacturing R&D
- Fuel and Feedstock Flexibility
- Distributed Energy (CHP and Reciprocating Engines)
- Inventions & Innovations

Crosscutting technologies for diverse, energy-intensive manufacturing processes

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Technology R&D: Focus on Energy Efficiency

Industrial Reaction & Separation

Develop technologies for efficient reaction and separation processes

High-Temperature Processing

Develop energy-efficient, high-temperature process technologies for producing metals and non-metallic minerals

Energy Conversion Systems

Develop high-efficiency steam generation and combustion technologies and improved energy recovery technologies

Fabrication & Infrastructure

Develop energy-efficient technologies for making near net-shape finished products from basic materials

ITP Technology Highlights

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Modular equipment that enables more flexible operations while achieving enormous energy savings

Isothermal Melting (ITM) Process

- **Continuous flow system with immersion heaters that convert electricity to melting energy with 98% efficiency**
  - 50% less energy consumption than traditional furnace
  - Zero in-plant emissions
  - April 2006 ribbon-cutting ceremony highlighted scale-up demonstration at a General Motors fac

SuperBoiler

- **Gas-fired package boiler incorporating innovative concepts in combustion, heat transfer, heat recovery, and control components**
  - Capable of achieving energy efficiencies ≥94%
  - Field evaluation of firetube boiler initiated in 2006

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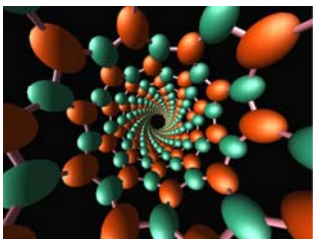
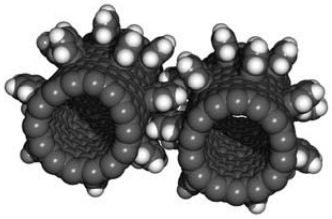
Next-Generation Manufacturing

Nanomanufacturing:

Develop efficient techniques and manufacturing processes for **nano-enabled products**

Enable mass production and application of **nanotechnologies that could transform industrial processes**





Next-Generation Manufacturing Concepts:

Improve yield

Reduce waste

Improve energy efficiency throughout the supply chain

Reduce environmental impacts

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Save Energy Now Services

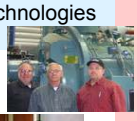
Goal: Drive a 25% reduction in industrial energy intensity in 10 years

Information
- Website
- Information Center
- Tip Sheets
- Case studies
- Webcasts
- Emerging Technologies

Tools
- Process Heating
- Steam Systems
- Plant Energy Profiler
- Motors & Pumps
- Fans

Assessments
- Energy Savings Assessments
- Industrial Assessment Centers

Training
- Basic
- Advanced
- Qualified Specialist



Standards
- Plant Certification

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DOE Power Based Software Decision Support Tools Available via the Website

- **Motor Master +** Assists in energy-efficient motor selection and management. (International)
- **Pumping System Assessment Tool** Assesses the efficiency of pumping system operations.
- **Fan System Assessment Tool** quantifies potential benefits of a more optimally configured fan system
- **Air Master+** Provides comprehensive information on assessing compressed air systems.
- **Industrial Facilities Tool** Assesses HVAC, Lighting .. upgrade opportunities.
- **Chilled Water System Assessment Tool** Assesses the efficiency of a chilled water system.

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DOE Fuel Based Software Decision Support Tools Available via the Website

- **Steam System Scoping Tool** Profiles and grades large steam system operations/management.
- **Steam System Assessment Tool** Assesses potential benefits of specific steam-system improvements.
- **3EPlus Insulation Assessment Tool** Calculates most economical thickness of insulation for a variety of operating conditions.
- **Plant Energy Profiler** profiles plant energy supply along consumption streams and identifies energy savings opportunities
- **Process Heating Assessment and Survey Tool** Assesses energy use in furnaces, ovens and kilns along with performance improvements
- **Energy Management Tool Suite** integrates ITP's technical solutions system based tools along with additional Energy Management Best Practice support capabilities

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Application of the

Pumping System Assessment Tool

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An introduction to the Pumping System Assessment Tool (PSAT)

- Goal: to assist pump users in identifying pumping systems that are the most likely candidates for energy and cost savings
- Requires field measurements or estimates of flow rate, pressure, and motor power or current
- Uses pump and motor performance data from Hydraulic Institute standard ANSI/HI-1.3 and MotorMaster+ to estimate existing, achievable performance

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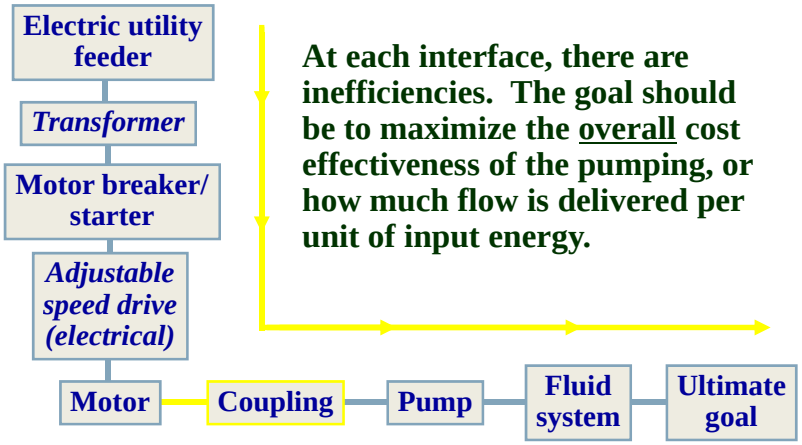
Big picture perspective of energy flow for pumping systems



At each interface, there are inefficiencies. The goal should be to maximize the <u>overall</u> cost effectiveness of the pumping, or how much flow is delivered per unit of input energy.

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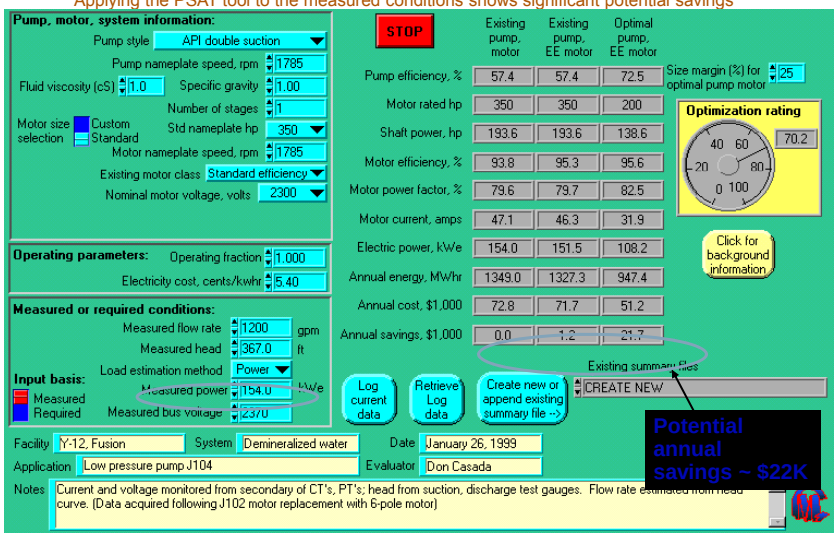
Applying the PSAT tool to the measured conditions shows significant potential savings



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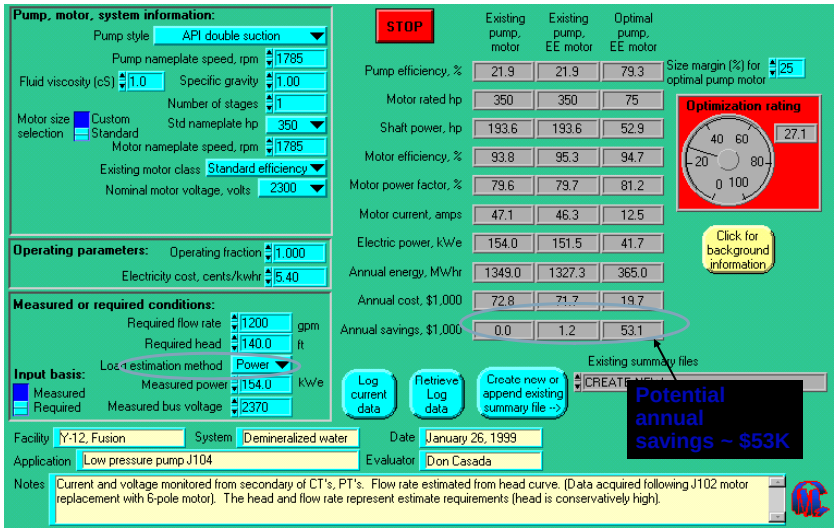
Using the required head estimate instead of the actual operating head could yield much greater savings



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AirMaster+: A Compressed Air Systems Assessment Tool

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AirMaster Plus can be used to baseline a compressed air system and then evaluate the energy savings from seven EEM's:

-Reduce Plant Air Leaks
-Adjust Manual Staging
-Use Unloading Controls
-Reduce System Pressure
-Sequence Compressors
-Reduce Run Time
-Add Primary Storage

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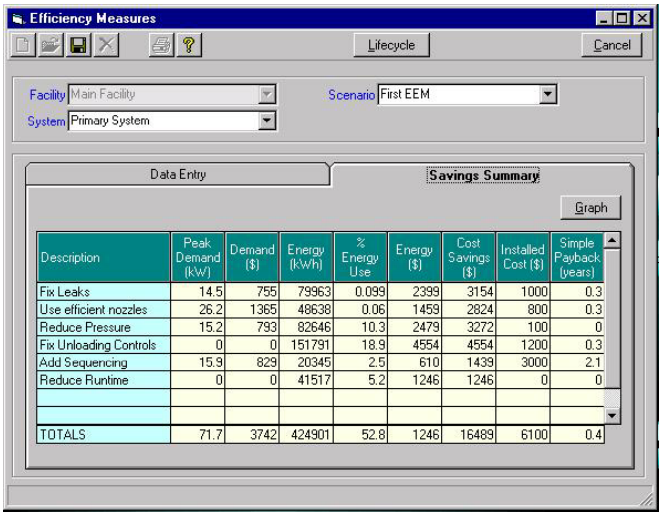
Savings Summary Report



Description	Peak Demand (kW)	Demand ($)	Energy (kWh)	% Energy Use	Energy ($)	Cost Savings ($)	Installed Cost ($)	Simple Payback (years)
Fix Leaks	14.5	755	79963	0.099	2399	3154	1000	0.3
Use efficient nozzles	26.2	1365	48638	0.06	1459	2824	800	0.3
Reduce Pressure	15.2	793	82646	10.3	2479	3272	100	0
Fix Unloading Controls	0	0	151791	18.9	4554	4554	1200	0.3
Add Sequencing	15.9	829	20345	2.5	610	1439	3000	2.1
Reduce Runtime	0	0	41517	5.2	1246	1246	0	0
TOTALS	71.7	3742	424901	52.8	1246	16489	6100	0.4

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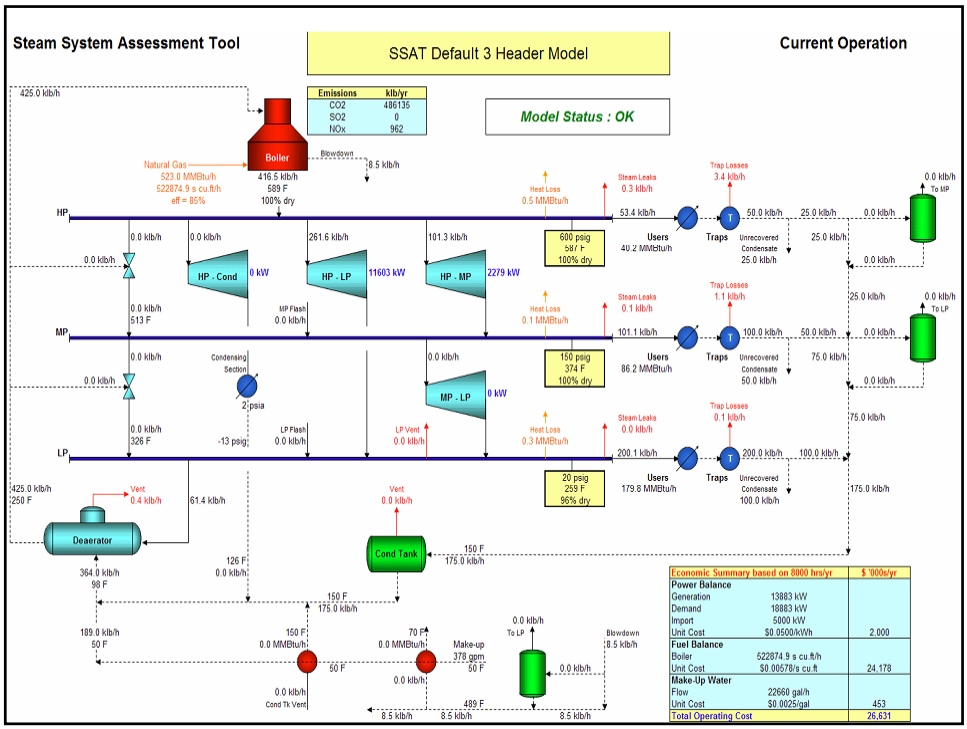
Steam System Assessment Tool (SSAT)

- PURPOSE:
  - Demonstrate the magnitude of energy, cost, and emission savings related to specific steam system improvement opportunities
- AUDIENCE:
  - Engineers involved with operation and/or improvement of steam systems



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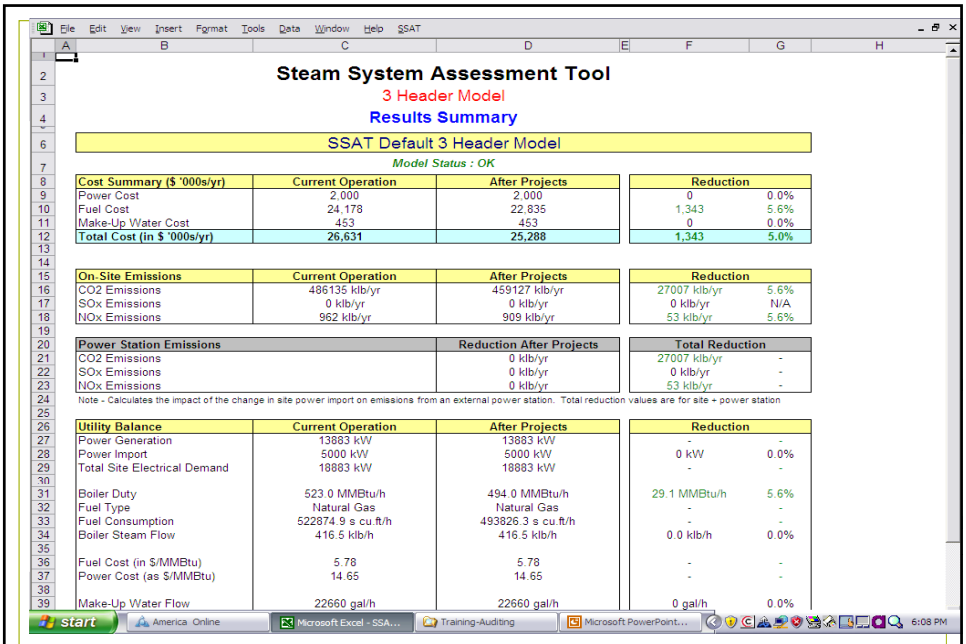
You Can Use SSAT To Evaluate These Key Steam Improvement Initiatives

- Real Cost Of Steam
- Steam Quality
- **Boiler Efficiency**
- Alternative Fuels
- Cogeneration Opportunities
- Steam Turbines vs PRVs
- Boiler Blowdown
- **Condensate Recovery**
- **Steam Trap Operating Efficiency**
- Heat Recovery
- Vent Steam
- Steam Leaks
- Insulation Efficiency
- Emissions Calculations



File Edit View Insert Format Tools Data Window Help SSAT

Steam System Assessment Tool

3 Header Model

Results Summary

SSAT Default 3 Header Model

Model Status : OK

Cost Summary ($ '000s/yr)	Current Operation	After Projects	Reduction	
Power Cost	2,000	2,000	0	0.0%
Fuel Cost	24,178	22,835	1,343	5.6%
Make-Up Water Cost	453	453	0	0.0%
Total Cost (in $ '000s/yr)	**26,631**	**25,288**	**1,343**	**5.0%**

On-Site Emissions	Current Operation	After Projects	Reduction	
CO2 Emissions	486135 klb/yr	459127 klb/yr	27007 klb/yr	5.6%
SOx Emissions	0 klb/yr	0 klb/yr	0 klb/yr	N/A
NOx Emissions	962 klb/yr	909 klb/yr	53 klb/yr	5.6%

Power Station Emissions	Reduction After Projects	Total Reduction
CO2 Emissions	0 klb/yr	27007 klb/yr -
SOx Emissions	0 klb/yr	0 klb/yr -
NOx Emissions	0 klb/yr	53 klb/yr -

Note - Calculates the impact of the change in site power import on emissions from an external power station. Total reduction values are for site + power station

Utility Balance	Current Operation	After Projects	Reduction	
Power Generation	13883 kW	13883 kW	-	-
Power Import	5000 kW	5000 kW	0 kW	0.0%
Total Site Electrical Demand	18883 kW	18883 kW	-	-
Boiler Duty	523.0 MMBtu/h	494.0 MMBtu/h	29.1 MMBtu/h	5.6%
Fuel Type	Natural Gas	Natural Gas	-	-
Fuel Consumption	522874.9 s cu.ft/h	493826.3 s cu.ft/h	-	-
Boiler Steam Flow	416.5 klb/h	416.5 klb/h	0.0 klb/h	0.0%
Fuel Cost (in $/MMBtu)	5.78	5.78	-	-
Power Cost (as $/MMBtu)	14.65	14.65	-	-
Make-Up Water Flow	22660 gal/h	22660 gal/h	0 gal/h	0.0%

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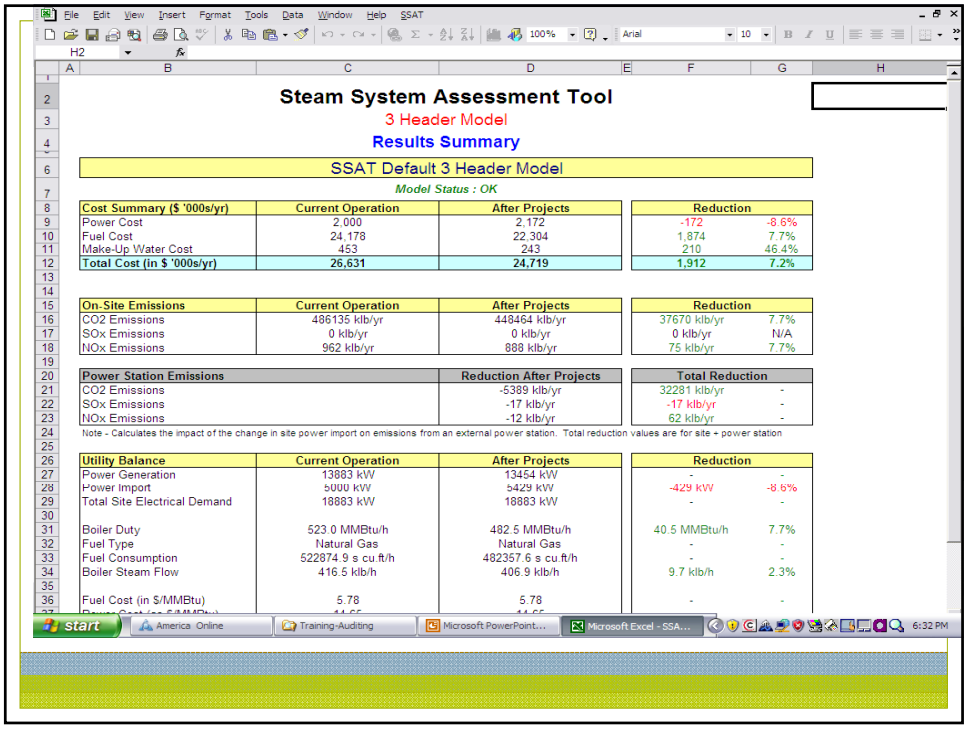


Steam System Assessment Tool

3 Header Model

Results Summary

SSAT Default 3 Header Model

Model Status : OK

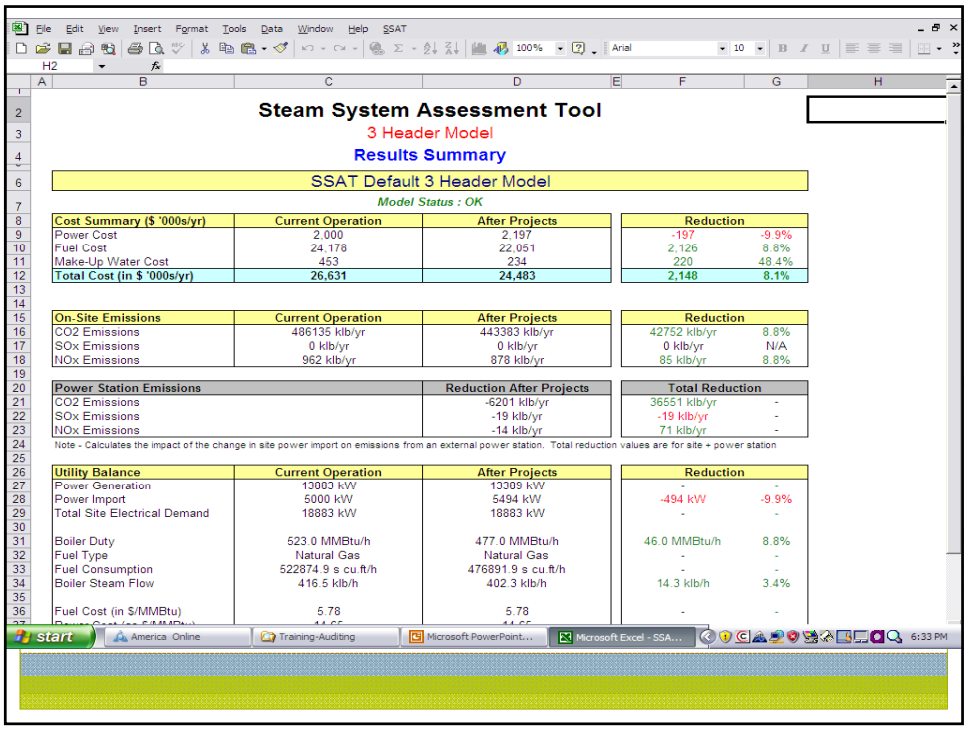
Cost Summary ($ '000s/yr)	Current Operation	After Projects	Reduction	
Power Cost	2,000	2,172	-172	-8.6%
Fuel Cost	24,178	22,304	1,874	7.7%
Make-Up Water Cost	453	243	210	46.4%
Total Cost (in $ '000s/yr)	**26,631**	**24,719**	**1,912**	**7.2%**

On-Site Emissions	Current Operation	After Projects	Reduction	
CO2 Emissions	486135 klb/yr	448464 klb/yr	37670 klb/yr	7.7%
SOx Emissions	0 klb/yr	0 klb/yr	0 klb/yr	N/A
NOx Emissions	962 klb/yr	888 klb/yr	75 klb/yr	7.7%

Power Station Emissions	Reduction After Projects	Total Reduction	
CO2 Emissions	-5389 klb/yr	32281 klb/yr	-
SOx Emissions	-17 klb/yr	-17 klb/yr	-
NOx Emissions	-12 klb/yr	62 klb/yr	-

Note - Calculates the impact of the change in site power import on emissions from an external power station. Total reduction values are for site + power station

Utility Balance	Current Operation	After Projects	Reduction	
Power Generation	13883 kW	13454 kW	-	-
Power Import	5000 kW	5429 kW	-429 kW	-8.6%
Total Site Electrical Demand	18883 kW	18883 kW	-	-
Boiler Duty	523.0 MMBtu/h	482.5 MMBtu/h	40.5 MMBtu/h	7.7%
Fuel Type	Natural Gas	Natural Gas	-	-
Fuel Consumption	522874.9 s cu.ft/h	482357.6 s cu.ft/h	-	-
Boiler Steam Flow	416.5 klb/h	406.9 klb/h	9.7 klb/h	2.3%
Fuel Cost (in $/MMBtu)	5.78	5.78	-	-



Steam System Assessment Tool

3 Header Model

Results Summary

SSAT Default 3 Header Model

Model Status : OK

Cost Summary ($ '000s/yr)	Current Operation	After Projects	Reduction	
Power Cost	2,000	2,197	-197	-9.9%
Fuel Cost	24,178	22,051	2,126	8.8%
Make-Up Water Cost	453	234	220	48.4%
Total Cost (in $ '000s/yr)	**26,631**	**24,483**	**2,148**	**8.1%**

On-Site Emissions	Current Operation	After Projects	Reduction	
CO2 Emissions	486135 klb/yr	443383 klb/yr	42752 klb/yr	8.8%
SOx Emissions	0 klb/yr	0 klb/yr	0 klb/yr	N/A
NOx Emissions	962 klb/yr	878 klb/yr	85 klb/yr	8.8%

Power Station Emissions	Reduction After Projects	Total Reduction	
CO2 Emissions	-6201 klb/yr	36551 klb/yr	-
SOx Emissions	-19 klb/yr	-19 klb/yr	-
NOx Emissions	-14 klb/yr	71 klb/yr	-

Note - Calculates the impact of the change in site power import on emissions from an external power station. Total reduction values are for site + power station

Utility Balance	Current Operation	After Projects	Reduction	
Power Generation	13883 kW	13389 kW	-	-
Power Import	5000 kW	5494 kW	-494 kW	-9.9%
Total Site Electrical Demand	18883 kW	18883 kW	-	-
Boiler Duty	523.0 MMBtu/h	477.0 MMBtu/h	46.0 MMBtu/h	8.8%
Fuel Type	Natural Gas	Natural Gas	-	-
Fuel Consumption	522874.9 s cu.ft/h	476891.9 s cu.ft/h	-	-
Boiler Steam Flow	416.5 klb/h	402.3 klb/h	14.3 klb/h	3.4%
Fuel Cost (in $/MMBtu)	5.78	5.78	-	-

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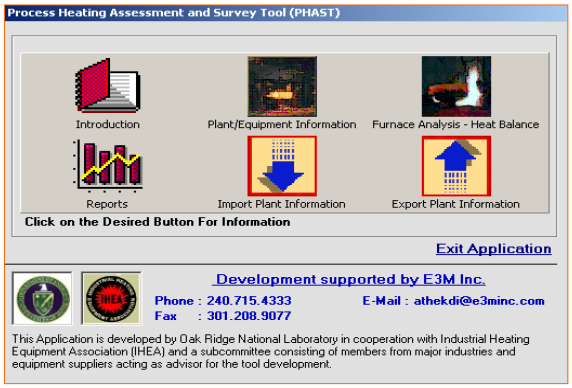
Process Heating Assessment and Survey Tool (PHAST)



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Process Heating Assessment and Survey Tool (PHAST)

What is PHAST?

- A tool that can be used to:
- Estimate annual energy use and energy cost for furnaces and boilers in a plant
- Perform detail heat balance and energy use analysis that identifies areas of energy use, efficiency and energy losses for a furnace
- Perform “what-if” analysis for possible energy reduction and efficiency improvements through changes in operation, maintenance and retrofits of components/systems
- Obtain information on energy saving methods and identify additional resources

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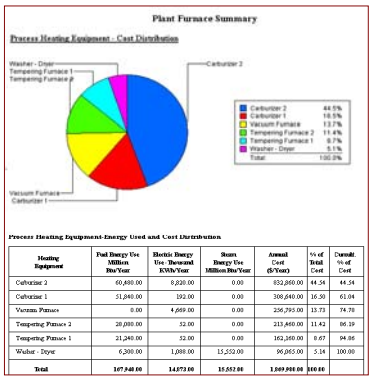
Plant Energy Use and Cost Distribution Report*



Plant Furnace Summary

Process Heating Equipment - Cost Distribution

Process Heating Equipment-Energy Used and Cost Distribution

Heating Equipment	Fuel Energy Use Million Btu/Year	Electric Energy Use - Thousand KWH/Year	Steam Energy Use Million Btu/Year	Annual Cost ($/Year)	% of Total Cost	Cumult % of Cost
Carburizer 2	60,480.00	8,820.00	0.00	832,860.00	44.54	44.54
Carburizer 1	31,040.00	192.00	0.00	308,640.00	16.50	61.04
Vacuum Furnace	0.00	4,669.00	0.00	256,795.00	13.73	74.78
Tempering Furnace 2	20,080.00	52.00	0.00	213,460.00	11.42	86.19
Tempering Furnace 1	21,240.00	52.00	0.00	162,360.00	8.67	94.86
Washer - Dryer	6,200.00	1,088.00	15,522.00	96,065.00	5.14	100.00
Total	107,040.00	14,873.00	15,552.00	1,869,900.00	100.00	

The report shows

- Estimated annual energy use and estimate annual cost of energy for heating equipment (furnaces, ovens etc.)
- List of heating equipment and % of total energy cost used for each equipment in order of annual cost of energy used.

*** for the Surveyed Process Heating Equipment**

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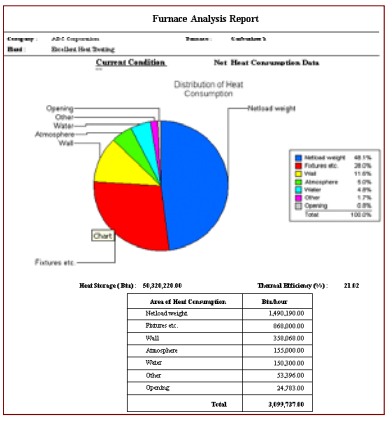
Furnace Heat Balance
Energy Use – Losses Distribution



Furnace Analysis Report

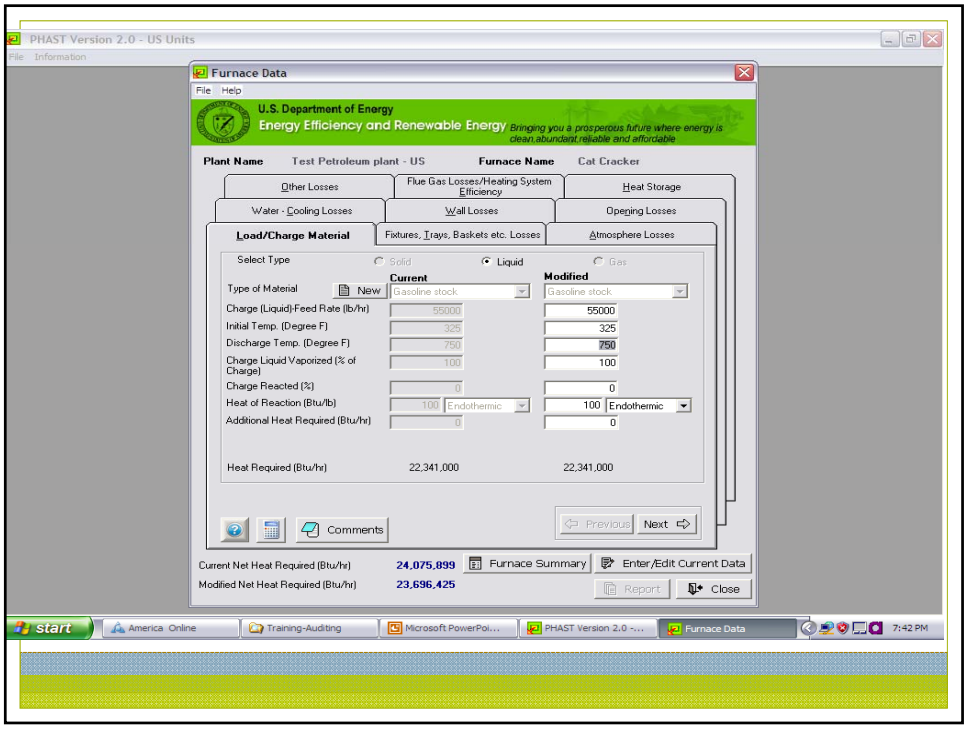
Current Condition Net Heat Consumption Data

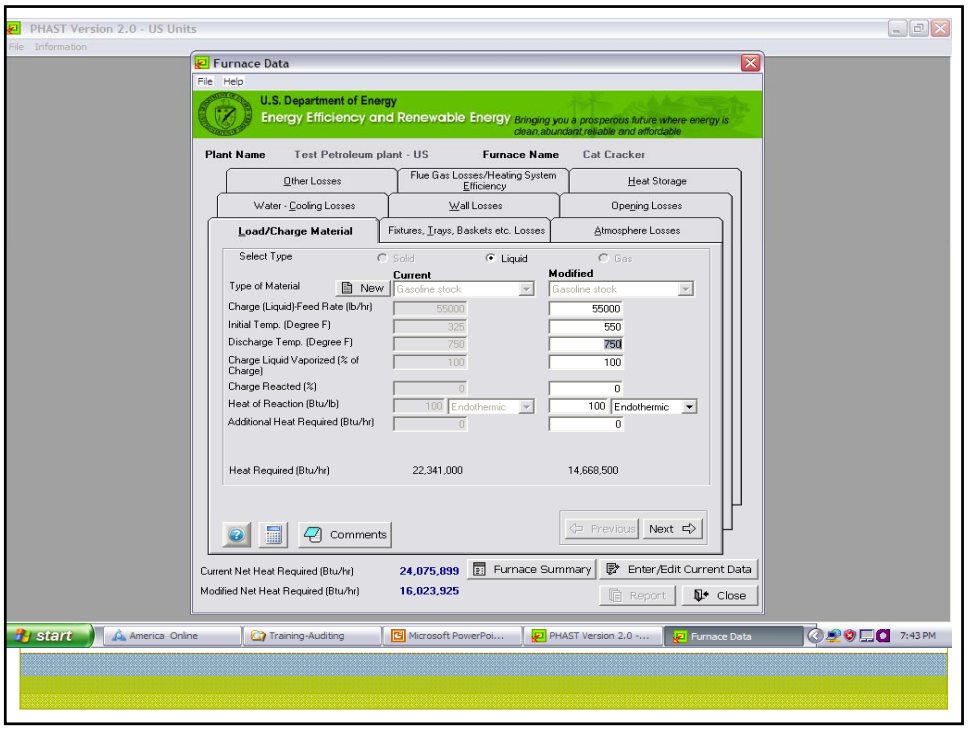
Distribution of Heat Consumption

Area of Heat Consumption	Btu/hour
Netload weight	1,490,190.00
Fixtures etc.	868,000.00
Wall	330,060.00
Atmosphere	355,000.00
Water	130,300.00
Other	53,296.00
Opening	24,703.00
Total	3,699,737.00

The report shows

Analysis of energy used in various parts of a furnace under a given operating condition.


PHAST Version 2.0 - US Units
File Information
Furnace Data
File Help
U.S. Department of Energy
Energy Efficiency and Renewable Energy
Bringing you a prosperous future where energy is clean,abundant,reliable and affordable
Plant Name Test Petroleum plant - US
Furnace Name Cat Cracker
Other Losses
Flue Gas Losses/Heating System Efficiency
Heat Storage
Water - Cooling Losses
Wall Losses
Opening Losses
Load/Charge Material
Fixtures, Trays, Baskets etc. Losses
Atmosphere Losses
Select Type
Solid
Liquid
Gas
Current
Modified
Type of Material
New
Gasoline stock
Charge (Liquid)-Feed Rate (lb/hr)
55000
Initial Temp. (Degree F)
325
Discharge Temp. (Degree F)
750
Charge Liquid Vaporized (% of Charge)
100
Charge Reacted (%)
0
Heat of Reaction (Btu/lb)
100
Endothermic
Additional Heat Required (Btu/hr)
Heat Required (Btu/hr)
22,341,000
22,341,000
Comments
Previous
Next
Current Net Heat Required (Btu/hr)
24,075,899
Modified Net Heat Required (Btu/hr)
23,696,425
Furnace Summary
Enter/Edit Current Data
Report
Close
start
America Online
Training-Auditing
Microsoft PowerPoi...
PHAST Version 2.0 -...
Furnace Data
7:42 PM


PHAST Version 2.0 - US Units
File Information
Furnace Data
File Help
U.S. Department of Energy
Energy Efficiency and Renewable Energy
Bringing you a prosperous future where energy is clean,abundant,reliable and affordable
Plant Name Test Petroleum plant - US
Furnace Name Cat Cracker
Other Losses
Flue Gas Losses/Heating System Efficiency
Heat Storage
Water - Cooling Losses
Wall Losses
Opening Losses
Load/Charge Material
Fixtures, Trays, Baskets etc. Losses
Atmosphere Losses
Select Type
Solid
Liquid
Gas
Current
Modified
Type of Material
New
Gasoline stock
Charge (Liquid)-Feed Rate (lb/hr)
55000
Initial Temp. (Degree F)
325
550
Discharge Temp. (Degree F)
750
Charge Liquid Vaporized (% of Charge)
100
Charge Reacted (%)
0
Heat of Reaction (Btu/lb)
100
Endothermic
Additional Heat Required (Btu/hr)
Heat Required (Btu/hr)
22,341,000
14,668,500
Comments
Previous
Next
Current Net Heat Required (Btu/hr)
24,075,899
Modified Net Heat Required (Btu/hr)
16,023,925
Furnace Summary
Enter/Edit Current Data
Report
Close
start
America Online
Training-Auditing
Microsoft PowerPoi...
PHAST Version 2.0 -...
Furnace Data
7:43 PM

Tool Metrics

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2006, 2007, 2008 and 2009 Annual Saving Opportunities

System Area	Identified Annual Savings			Implemented Annual Savings		
	# of completed ESA's	Identified Source Energy Savings Upgrades (TBtu)	Identified Cost Savings ($)	Implemented Source Energy Savings (TBtu)	Implemented Cost Savings ($)	Implemented CO2 Savings (metric tons)
Compressed Air	160	3.84	$23,196,826	0.95	$4,933,793	55,448
Fans	43	7.93	$46,561,260	0.09	$498,984	5,001
Process Heating	241	49.74	$336,449,703	5.6	$42,882,228	300,240
Pumps	88	3.23	$17,518,946	0.17	$936,696	9,768
Steam	329	80.49	$649,726,971	21.01	$113,819,232	1,566,705
Multi System Paper	21	7.98	$55,637,900	0.47	$2,172,294	8,739
Total	*882*	*153.2*	*$1,129,091,607*	*28.3*	*$165,243,227*	*1,945,901*

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Energy Assessment Results (2006-2010)

Total Plants Assessed:	**2,324**
Identified Cost Savings:	**$1.3 billion (2,145 reporting)**
Identified Energy Savings:	**180 trillion Btu**
Identified CO_2 Savings:	**11.2 million metric tons**

Average plant found ways to reduce energy bill by about 8%

Implemented approximately 1/6 of cost savings

Approximately 1/3 is in progress and planned

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Savings from Energy Assessments

Equivalent to:

- 59 coal plants
- ~9,000 1.5MW wind turbines
- ~2.4 million passenger cars off the road

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Energy Management Tool Suite (EMTS) Possible Capabilities

- Front end Project Tracker spreadsheet to prioritize potential and completed projects within a plant based on payback and IRR.
- Various payback/financial scenarios to analyze energy price changes within the Tracker
- Project Tracker to provide, for each project CO2 emission impact.

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Energy Management Tool Suite (EMTS) Possible Capabilities

- EMTS to support sustained energy management through a sequence of planning, doing, checking, and acting activities
- EMTS user to allow a flexible drilled process of profiling, scorecards, detailed energy project and or systems analysis, and implementation solution analysis so as to enable the user to continually implement of energy savings projects in the long-term.
- EMTS is a potential key product that would need to go through potential review by a core team that will meet regularly.

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Training Opportunities for Software Tools

- Awareness Workshops (usually 1-2 hours)
- Webcasts (1-2 hours)
- End-user training (1-2 days)
- Qualified specialist training (2-3 days)
  - Potential resource for plant personnel

See www.eere.energy.gov/industry for details

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Save Energy Now LEADER – A Corporate Commitment to Meet the Save Energy Now National Goal

A new public-private partnership dedicated to leading the way to a noticeably more energy efficient industrial sector with a smaller carbon footprint

Framework: ITP will provide enhanced access to technical resources and financial assistance to "prime the pump" for private sector investment in efficiency.

Drive a 25% Reduction in Industrial Energy Intensity by 2020

A 25% reduction in industrial energy intensity is equal to the total energy consumed in the State of California in all sectors each year— 8.4 quads annually.

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LEADER Requirements

- Pledge to adopt a goal to reduce energy intensity 25% or more over 10 years
  - Designate an energy manager
  - Develop an energy intensity baseline
  - Develop an energy management plan
- Take steps to reduce energy intensity and reduce carbon emissions
- Report energy intensity data and achievements annually to DOE
- Assess operational and financial feasibility

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LEADER Benefits

- ITP will provide tailored technical assistance:
  - Develop the energy baseline
  - Develop an energy management plan
  - Access to a Technical Account Manager
- Priority access to plant assessments and emerging advanced technologies
- Resources and tools for energy analysis
- Training workshops on financing options, advanced technology, energy management, software tools, etc.
- National recognition for commitments and progress in achieving goals
- Materials for industrial supply chains

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LEADER Customized Services

Take the Pledge

Receive:
- DOE Representative
- Individual Technical Account Manager
- No-cost expert Technical Assistance
- Recognition as a LEADER

DOE Representative contacts the Energy Manager

Develop customized plan:
- Guide to how to get the most out of the *Save Energy Now* portfolio
- Access to DOE Contractor Assistance
- Track reporting requirements
- Arrange for delivery of services
  - Energy assessments
  - Consultation with Energy Expert

Work with a DOE Energy Expert

Provide technical assistance with:
- Developing a useful energy baseline and tracking method
  - Tailored to the plant's operations and product output
  - Satisfies the reporting requirements
- Writing an energy management plan
- Developing engineering feasibility studies to help implement projects

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Save Energy Now ALLY

- Leverage collaborations and partnerships to expand outreach, resources, and impact
- Build a nationwide network of partners to provide resources and incentives to help industry meet goals

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Save Energy Now ALLY

- Based on ongoing research, ITP is pursuing new ALLY Organizations
  - States
  - Trade Associations & Allies
  - Suppliers & Vendors
  - Public officials
  - Utilities – gas, electric, water
  - Regional Affiliations
  - Universities & Colleges
  - Federal Agencies
  - National Laboratories
  - NGOs

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ALLY Relationships

Partnering as an ALLY Organization allows you to:

- Tap into ITP's resources *and* technical expertise that enable success
- Enhance your communications on energy efficiency
- Provide added value to your members, customers, or stakeholders
- Increase your visibility as a steward of energy efficiency and sustainability
- Co-brand your communication materials with the *Save Energy Now* LEADER logo

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ALLY Agreement

The *Save Energy Now* ALLY Partnership Agreement is expected to encompass the following initiatives

- Workshops and/or Seminars / Webinars
- Development and Dissemination of Information, Tools & Resources
- Commercialization of Emerging Technologies
- Promotion of ITP Solicitations
- Participation in Public Events
- Web Site
- Trade Journal Articles
- Future Publications, Communications and Outre
- Case Study Referrals
- Year End Report Required

Save ENERGY Now ®

U.S. DEPARTMENT OF ENERGY ALLY INDUSTRY PARTNERSHIP

How Can I Contact ITP?

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- Energy Efficiency and Renewable Energy Information Center:
  1-877-EERE-INF (1-877-337-3463) or eereic@ee.doe.gov
  or http://www1.eere.energy.gov/industry/
- Jef Walker, Partnership Development & Deployment Supervisor
  (202) 586-5059
- Scott Hutchins, Trade Organizations and Partnerships
  (202) 586-0670
- Sandy Glatt, States and Utilities
  (303) 275-4857
- Bill Orthwein, Tools and Training (202) 586-3807